

In the Claims

1-9. (cancelled)

10. (new) A process for producing cling fastener parts with a large number of interlocking members, comprising the steps of:

supplying a formulation of radiation-cross linkable prepolymers to a forming station;

shaping the formulation in the forming station into a large number of interlocking members together with a base; and

treating the interlocking members and base with radiation to cure the formulation thereof.

11. (new) A process according to claim 10 wherein said shaping is performed by molding, casting and/or compression molding.

12. (new) A process according to claim 10 wherein said prepolymers are acrylic.

13. (new) A process according to claim 10 wherein the prepolymers are selected from the group consisting of polyester acrylates, epoxy acrylates, polyether acrylates, silicone acrylates and urethane acrylates.

14. (new) A process according to claim 10 wherein the prepolymers are urethane acrylates which are aliphatic mono-, bi- or trifunctional urethane acrylates.

15. (new) A process according to claim 10 wherein the formulation encompasses reactive diluents.

16. (new) A process according to claim 15 wherein the reactive diluents are monomers.

17. (new) A process according to claim 15 wherein the reactive diluents are acrylates.

18. (new) A process according to claim 17 wherein the acrylates are monofunctional acrylates from the group consisting of butyl acrylate, 2-ethylhexyl acrylate, hydroxyethyl acrylate, hydroxypropyl acrylate, 4-hydroxybutyl acrylate, ethyl diglycol acrylate, isodecyl acrylate and 2-ethoxyethyl acrylate; bifunctional acrylates from the group consisting of diethylene glycol diacrylate, dipropylene glycol diacrylate, triethylene glycol diacrylate, tripropylene glycol diacrylate and 1,6-hexanediol diacrylate; and/or trifunctional acrylates from the group consisting of trimethylolpropane triacrylate and pentaerythritol triacrylate.

19. (new) A process according to claim 18 wherein
the reactive diluents are 2-ethoxyethyl acrylate, isodecyl acrylate, 1,6-hexanediol diacrylate
and trimethylolpropane triacrylate.

20. (new) A process according to claim 10 wherein
the radiation curing takes place by way of an electron beam.

21. (new) A process according to claim 10 wherein
the radiation curing takes place by way of UV radiation.

22. (new) A process according to claim 21 wherein
the formulation comprises at least one photoinitiator.

23. (new) A process according to claim 22 wherein
the photoinitiator is selected from the group consisting of α -hydroxyketones, α -aminoketones, dimethylketals of benzil, bisbenzoylphenylphosphine oxides, metallocenes, and derivatives thereof.

24. (new) A process according to claim 23 wherein
the photoinitiator is 2-hydroxy-2-methyl-1-phenylpropan-1-one.

25. (new) A process according to claim 11 wherein
the molding, casting or compression molding takes place in a gap between a shaping roll
and a backing roll; and
the shaping roll has a large number of radial cutouts, where the interlocking members are
formed during passage through the gap.

26. (new) A process according to claim 24 wherein
the formulation has a viscosity at 25°C from 150 to 20,000 mPa.s.

27. (new) A process according to claim 26 wherein
the viscosity is from 300 to 5,000 mPa.s.

28. (new) A process according to claim 10 wherein
the shaping takes place in a gap between a shaping roll and a backing roll by compressing
the formulation into radial cutouts in the shaping roll.

29. (new) An apparatus for producing cling fastener parts, comprising:
a shaping roll having a plurality of radial cutouts;
a backing roll spaced from said shaping roll to define a gap therebetween;
feed means for supplying a formulation of radiation-cross linkable prepolymers to said gap;
and

a radiation source curing said prepolymers after being fed into said radial cutouts, said radiation source being one of a UV radiation source and an electron-beam source.